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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,228	09/17/2003	Ligang Lu	YOR920030343US1 (16974)	5456
23389 7590 02/27/2007 SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			EXAMINER PHILIPPE, GIMS S	
			ART UNIT 2621	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/665,228

Applicant(s)

LU ET AL.

Examiner

Gims S. Philippe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

This is a first office action in response to application no. 10/665,228 filed on September 17, 2003 in which claims 1-22 are presented for examination.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Legall et al. (US Patent no. 5,929,916).

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Regarding claims 1, 12, and 22, Legall discloses the same method for real-time multi-pass encoding of a sequence of video frames (See Legall col. 6, lines 39-40) comprising the steps of continuously collecting information on the statistics and rate-quality characteristics of a sequence of incoming video frames (See Legall col. 4, lines 53-61, col. 6, lines 44-56), deriving a coding strategy to encode the sequence of incoming video frames based on the information collected (See Legall col. 6, lines 56-63), and encoding the incoming frames by the derived coding strategy (See Legall col. 6, lines 63-67, col. 7, lines 1-9).

As per claims 2 and 13, most of the limitations of this claim have been noted in the above rejection of claim 1. In addition, Legall further collects information related to past, current and future input video frames (See Legall col. 6, lines 49-60 and col. 23, lines 18-24).

As per claims 3 and 14, most of the limitations of these claims have been noted in the above rejection of claim 2. In addition, Legall further feed the sequence to an input buffer (See Legall col. 13, lines 65-67 and col. 14, lines 1-5).

As per claims 4 and 15, most of the limitations of these claims have been noted in the above rejection of claim 3. In addition, Legall further generates coding parameters instructing the second encoder to encode incoming frames according to the derived strategy (See Legall col. 19, lines 12-22).

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As per claims 5 and 16, most of the limitations of these claims have been noted in the above rejection of claim 3. In addition, Legall calculates a sufficient look ahead window for the determining a size of the input buffer and correlating the size to the processing delay (See Legall col. 23, lines 18-24).

As per claims 6 and 17, most of the limitations of these claims have been noted in the above rejection of claim 3. In addition, Legall further provides weighted picture complexity as a function of motion magnitude (See Legall col. 4, lines 62-67, and col. 5, lines 1-2).

As per claims 7 and 18, most of the limitations of this claim have been noted in the above rejection of claim 3. In addition, Legall further determines a target bit allocation plan for the video frames (See Legall col. 6, lines 49-60).

As per claims 8-9, and 19, most of the limitations of these claims have been noted in the above rejection of claim 3. In addition, Legall further implements rate control to prevent underflow and overflow of a decode buffer requirement according to MPEG-2 (See Legall col. 6, lines 49-60).

As per claims 10 and 20, most of the limitations of these claims have been noted in the above rejection of claims 3, 4 and 15 as noted in Legall col. 6, lines 44-67.

As per claims 11 and 21, Legall further discloses operating the first and second encoder at the same constant bit rate (See Legall col. 4, lines 5-11).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zhang et al. (US Patent no. 6925120) teaches transcoder for scalable multi-layer constant quality video bitstreams.

Cougnar et al. (US Patent no. 6466621) teaches video coding method and corresponding video coder.

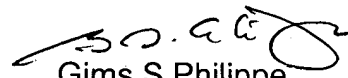
Coelho (US Patent no. 6037982) teaches multi-pass video compression.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri Mehrdad can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gims S Philippe
Primary Examiner
Art Unit 2621

GSP

February 15, 2007